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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,349	01/06/2006	Thomas Farrell	05-349	7212

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EXAMINER

CHARIOUI, MOHAMED

ART UNIT PAPER NUMBER

2857

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/533,349

Applicant(s)

FARRELL ET AL.

Examiner

Mohamed Charioui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Applicant cancelled claims 1-14.

## **DETAILED ACTION**

### ***Drawing***

2. **Figure 1** is objected to because boxes are not labeled, The Examiner directs the applicant to 37 C.F.R. 1.84(n) and 1.84(o) which state, "Graphical drawing symbols may be used for conventional elements when appropriate" while "[o]ther symbols which are not universally recognized may be used, subject to approval by the Office" and that "[s]uitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing". Since the drawing in Figure 1 does not contain conventional elements, the Examiner may require descriptive legends for better understanding of the drawings. See MPEP 608.02.

### ***Abstract***

3. Abstract of the disclosure is objected to because it does not commence in a separate page.

A brief abstract of the technical disclosure in the specification must commence on a separate sheet, preferably following the claims, under the heading "Abstract " or "Abstract of the Disclosure." The sheet or sheets presenting the abstract may not include other parts of the application or other material. The abstract in an application filed under 35 U.S.C. 111 may not exceed 150 words in length. The purpose of the abstract is to enable the United States Patent and Trademark Office and the public generally to determine quickly

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from a cursory inspection the nature and gist of the technical disclosure. See MPEP 608.01 (b).

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 15-24** are rejected under 35 U.S.C. 101 because the claimed invention as a whole must accomplish a practical application. That is it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete claim should contain some indication of the practical application for the claimed invention. In claim 1, lines 7-8 only requires "effecting a comparison of the first and second set of measurements so as to provide a measure of the degradation in the laser." and does not produce useful, concrete and tangible results. For example, the results were not stored or communicated to the user.

**Claims 25-28** are rejected under 35 U.S.C. 101 because the claimed invention as a whole must accomplish a practical application. That is it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373,

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47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete claim should contain some indication of the practical application for the claimed invention. In claim 25, lines 7-8 only requires "using a location of a nearest failed operating point about the second operating point to provide a vector of the degradation of the laser" and does not produce useful, concrete and tangible results. For example, the results were not stored or communicated to the user.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 15, 17 and 19-24** are rejected under 35 U.S.C. 102(e) as being anticipated by Anthon et al. (U.S. Pub. No. 2003/0026302).

**As per claims 15, 23 and 24**, Anthon et al. teach performing a first set of initial measurements on the laser to provide a reference set of measurements corresponding to a performance of the laser when no degradation has occurred, performing a second set of measurements on the laser where some degradation has occurred, and effecting a comparison of the first and second set of measurements so as to provide a measure of the degradation in the laser (see paragraphs [0010]; [0014]; and [0042]).

**As per claim 17**, Anthon et al. further teach setting a gain current of the laser to a specified predetermined value, wherein the predetermined specified value of the gain current selected is an average gain current of operating points in a lookup table corresponding to the laser (see paragraphs [001]; [0040]; and [0042]).

**As per claim 19**, Anthon et al. further teach that the comparison of the first set of measurements with the second set of measurements is carried out by comparing wavelength or etalon responses of the degradation of the device that are measured (see paragraphs [0014]-[0015]).

**As per claim 20**, Anthon et al. further teach the positions of mode jumps in the two sets of measurements are compared and a transform is obtained and wherein mode jumps from the second set of measurements are transformed to the same currents as corresponding mode jumps determined from the first measurement (see paragraphs [0011] and [0015]).

**As per claim 21**, Anthon et al. further teach converting operating points of the tunable laser by said transform to obtain a new set of operating points,

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wherein the new set of operating points compensates for degradation in the laser (see paragraphs [0004] and [0052]).

**As per claim 22**, Anthon et al. further teach locating a subset of mode jumps from the first measurement set; and re-measuring a region around each of the mode jumps in the same manner as the first set of measurements (see paragraphs [0052] and [0054]).

#### **Prior art**

6. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

**Maeda ['428]** discloses phase-continuous and frequency-variable light source.

**Jay et al. ['299]** disclose temperature correction calibration system and method for optical controllers.

**Endoh et al. ['571]** disclose tunable wavelength light source apparatus for stabilizing power intensity by using external auto-power control.

#### **Contact information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571) 272-2213. The examiner can normally be reached Monday through Friday, from 9 am to 6 pm.


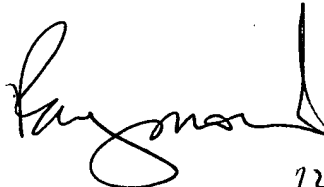
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

12/9/06

  
EDWARD RAYMOND  
PRIMARY EXAMINER  
22/11/06